

Civil Engineering Database Subject Heading Index

The **Civil Engineering Database (CEDB)** is designed to provide free, easy bibliographic access to all ASCE publications. The database covers ASCE documents published since 1970. It provides access to all the journals, conference proceedings, books, standards, manuals, magazines, and newspapers. The index terms below were assigned to papers published in this journal during 2003 from a CEDB subject heading list. The CEDB and subject heading list can be accessed on the Web at <http://www.pubs.asce.org/cedbsrch.html>.

Acoustic measurement

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. —Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Active control

Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. —Andrew J. Kurdila, Jing Li, Thomas Strganac, and Glenn Webb; 16(4), 167-76 (2003).

Aerial photography

FPGA Based Satellite Adaptive Image Compression System. —Stephen J. Visser, Anwar S. Dawood, and John A. Williams; 16(3), 129-37 (2003).

Aeroelasticity

Possio Integral Equation of Aeroelasticity Theory. —A. V. Balakrishnan; 16(4), 139-54 (2003).

Air flow

Possio Integral Equation of Aeroelasticity Theory. —A. V. Balakrishnan; 16(4), 139-54 (2003).

Boundary element method

Integration within Polygonal Finite Elements. —Gautam Dasgupta; 16(1), 9-18 (2003).

Clouds

Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. —D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Composite structures

Design of Flutter Characteristics of Composite Wings Using Frequency Constraint Optimization. —Narendra S. Khot and Jeffrey V. Zweben; 16(1), 19-30 (2003).

Compression

FPGA Based Satellite Adaptive Image Compression System. —Stephen J. Visser, Anwar S. Dawood, and John A. Williams; 16(3), 129-37 (2003).

Computation

Interpolants within Convex Polygons: Wachspress' Shape Functions. —Gautam Dasgupta; 16(1), 1-8 (2003).

Integration within Polygonal Finite Elements. —Gautam Dasgupta; 16(1), 9-18 (2003).

Computation of Three-Dimensional Nonlinear

Panel Flutter. —Raymond E. Gordnier and Miguel R. Visbal; 16(4), 155-66 (2003).

Control methods

Active Magnetic Control Methods for Small Satellite. —Sun Zhaowei, Yang Xu, and Yang Di; 16(1), 38-44 (2003).

Debris

Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. —D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Design

Integrated Microelectromechanical Gyroscopes. —Huikai Xie and Gary K. Fedder; 16(2), 65-75 (2003).

Disturbances

H_2 Energy Estimate of Boundary Controlled Vibrating Hybrid Structure Subject to Uncertain Forces. —Sujit K. Bose and Ganesh C. Gorain; 16(3), 115-20 (2003).

Electronic equipment

Integrated Microelectromechanical Gyroscopes. —Huikai Xie and Gary K. Fedder; 16(2), 65-75 (2003).

Capacitive Micromachined Ultrasonic Transducers: Theory and Technology. —Arif S. Ergun, Goksen G. Yaralioglu, and Butrus T. Khuri-Yakub; 16(2), 76-84 (2003).

Equations of motion

Possio Integral Equation of Aeroelasticity Theory. —A. V. Balakrishnan; 16(4), 139-54 (2003).

Evaluation

Full-Scale Field Evaluation of Microelectromechanical System-Based Biaxial Strain Transducer and Its Application in Fatigue Analysis. —M. Obadat, Hosin "David" Lee, M. Asghar Bhatti, and Brian Maclean; 16(3), 100-7 (2003).

Exploration

Decision Tree Assessment of Challenging Technologies for Mission to Europa. —Ram Manvi, Charles Weisbin, Wayne Zimmerman, and Guillermo Rodriguez; 16(3), 121-8 (2003).

Fabrication

Integrated Microelectromechanical Gyroscopes. —Huikai Xie and Gary K. Fedder; 16(2), 65-75 (2003).

Capacitive Micromachined Ultrasonic Transducers: Theory and Technology. —Arif S. Ergun, Goksen G. Yaralioglu, and Butrus T. Khuri-Yakub; 16(2), 76-84 (2003).

Fatigue life

Full-Scale Field Evaluation of Microelectromechanical System-Based Biaxial Strain Transducer and Its Application in Fatigue Analysis. —M. Obadat, Hosin "David" Lee, M. Asghar Bhatti, and Brian Maclean; 16(3), 100-7 (2003).

Finite elements

Interpolants within Convex Polygons: Wachspress' Shape Functions. —Gautam Dasgupta; 16(1), 1-8 (2003).

Integration within Polygonal Finite Elements. —Gautam Dasgupta; 16(1), 9-18 (2003).

Fluid flow

Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. —Jack Chen, Zhifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Fluid mechanics

Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. —Jack Chen, Zhifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Flutter

Design of Flutter Characteristics of Composite Wings Using Frequency Constraint Optimization. —Narendra S. Khot and Jeffrey V. Zweben; 16(1), 19-30 (2003).

Computation of Three-Dimensional Nonlinear Panel Flutter. —Raymond E. Gordnier and Miguel R. Visbal; 16(4), 155-66 (2003).

Frequency distribution

Design of Flutter Characteristics of Composite Wings Using Frequency Constraint Optimization. —Narendra S. Khot and Jeffrey V. Zweben; 16(1), 19-30 (2003).

Geometry

Interpolants within Convex Polygons: Wachspress' Shape Functions. —Gautam Dasgupta; 16(1), 1-8 (2003).

Hybrid methods

H_2 Energy Estimate of Boundary Controlled Vibrating Hybrid Structure Subject to Uncertain Forces. —Sujit K. Bose and Ganesh C. Gorain; 16(3), 115-20 (2003).

Hysteresis

Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. —Andrew J. Kurdila, Jing Li, Thomas Strganac, and Glenn Webb; 16(4), 167-76 (2003).

Ice

Decision Tree Assessment of Challenging Technologies for Mission to Europa. —Ram Manvi, Charles Weisbin, Wayne Zimmerman, and Guillermo Rodriguez; 16(3), 121-8 (2003).

Imaging techniques

Capacitive Micromachined Ultrasonic Transducers: Theory and Technology. —Arif S. Ergun, Goksen G. Yaralioglu, and Butrus T. Khuri-Yakub; 16(2), 76-84 (2003).

FPGA Based Satellite Adaptive Image Compression System. —Stephen J. Visser, Anwar S. Dawood, and John A. Williams; 16(3), 129-37 (2003).

Impact

Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. —D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Loads

Experimental Validation of Lagrange-Rayleigh-Ritz Modeling Technique for Mass Loaded Actively Controlled Panels. —G. S. Aglietti and E. Rogers; 16(1), 31-7 (2003).

Materials

Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. — Andrew J. Kurdila, Jing Li, Thomas Strganac, and Glenn Webb; 16(4), 167-76 (2003).

Mathematical models

Experimental Validation of Lagrange-Rayleigh-Ritz Modeling Technique for Mass Loaded Actively Controlled Panels. — G. S. Aglietti and E. Rogers; 16(1), 31-7 (2003).

Mathematical Modeling and Simulation of Dissolvable Hydrogels. — Areek N. Chatterjee, Qing Yu, J. S. Moore, and N. R. Aluru; 16(2), 55-64 (2003).

Methodology

Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. — Andrew J. Kurdila, Jing Li, Thomas Strganac, and Glenn Webb; 16(4), 167-76 (2003).

Micromechanics

Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. — Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Integrated Microelectromechanical Gyroscopes. — Huihai Xie and Gary K. Fedder; 16(2), 65-75 (2003).

Monitoring

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. — Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

NASA

Decision Tree Assessment of Challenging Technologies for Mission to Europa. — Ram Manvi, Charles Weisbin, Wayne Zimmerman, and Guillermo Rodriguez; 16(3), 121-8 (2003).

Nonlinear response

Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. — Andrew J. Kurdila, Jing Li, Thomas Strganac, and Glenn Webb; 16(4), 167-76 (2003).

Orbits

Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. — D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Panels

Experimental Validation of Lagrange-Rayleigh-Ritz Modeling Technique for Mass Loaded Actively Controlled Panels. — G. S. Aglietti and E. Rogers; 16(1), 31-7 (2003).

Poisson ratio

Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. — Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Polygons

Interpolants within Convex Polygons: Wachspress' Shape Functions. — Gautam Dasgupta; 16(1), 1-8 (2003).

Integration within Polygonal Finite Elements. — Gautam Dasgupta; 16(1), 9-18 (2003).

Prediction

Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. — D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Residual stress

Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. — Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Satellite communication

FPGA Based Satellite Adaptive Image Compression System. — Stephen J. Visser, Anwar S. Daoud, and John A. Williams; 16(3), 129-37 (2003).

Satellites

Active Magnetic Control Methods for Small Satellite. — Sun Zhaowei, Yang Xu, and Yang Di; 16(1), 38-44 (2003).

Sensors

Mathematical Modeling and Simulation of Dissolvable Hydrogels. — Areek N. Chatterjee, Qing Yu, J. S. Moore, and N. R. Aluru; 16(2), 55-64 (2003).

Integrated Microelectromechanical Gyroscopes. — Huihai Xie and Gary K. Fedder; 16(2), 65-75 (2003).

Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. — Jack Chen, Zifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. — Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Shape

Interpolants within Convex Polygons: Wachspress' Shape Functions. — Gautam Dasgupta; 16(1), 1-8 (2003).

Simulation

Mathematical Modeling and Simulation of Dissolvable Hydrogels. — Areek N. Chatterjee, Qing Yu, J. S. Moore, and N. R. Aluru; 16(2), 55-64 (2003).

Space structures

H_2 Energy Estimate of Boundary Controlled Vibrating Hybrid Structure Subject to Uncertain Forces. — Sujit K. Bose and Ganesh C. Gorain; 16(3), 115-20 (2003).

Spacecraft

Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. — D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Structural response

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. — Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Transducers

Capacitive Micromachined Ultrasonic Transducers: Theory and Technology. — Arif S. Ergun, Goksen G. Yaralioglu, and Butrus T. Khuri-Yakub; 16(2), 76-84 (2003).

Full-Scale Field Evaluation of Microelectromechanical System-Based Biaxial Strain Transducer and Its Application in Fatigue Analysis. — M. Obadat, Hosin "David" Lee, M. Asghar Bhatti, and Brian Maclean; 16(3), 100-7 (2003).

Turbulent boundary layers

Computation of Three-Dimensional Nonlinear Panel Flutter. — Raymond E. Gordnier and Miguel R. Visbal; 16(4), 155-66 (2003).

Velocity

Possio Integral Equation of Aeroelasticity Theory. — A. V. Balakrishnan; 16(4), 139-54 (2003).

Vibration

H_2 Energy Estimate of Boundary Controlled Vibrating Hybrid Structure Subject to Uncertain Forces. — Sujit K. Bose and Ganesh C. Gorain; 16(3), 115-20 (2003).

Young's modulus

Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. — Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Author Index

Aglietti, G. S.

Experimental Validation of Lagrange-Rayleigh-Ritz Modeling Technique for Mass Loaded Actively Controlled Panels. —G. S. Aglietti and E. Rogers; 16(1), 31-7 (2003).

Aluru, N. R.

Mathematical Modeling and Simulation of Dissolvable Hydrogels. —Aveek N. Chatterjee, Qing Yu, J. S. Moore, and N. R. Aluru; 16(2), 55-64 (2003).

Balakrishnan, A. V.

Possio Integral Equation of Aeroelasticity Theory. —A. V. Balakrishnan; 16(4), 139-54 (2003).

Bhatti, M. Asghar

Full-Scale Field Evaluation of Microelectromechanical System-Based Biaxial Strain Transducer and Its Application in Fatigue Analysis. —M. Obadat, Hosin "David" Lee, M. Asghar Bhatti, and Brian Maclean; 16(3), 100-7 (2003).

Bose, Sujit K.

H_2 Energy Estimate of Boundary Controlled Vibrating Hybrid Structure Subject to Uncertain Forces. —Sujit K. Bose and Ganesh C. Gorain; 16(3), 115-20 (2003).

Carryer, Ed

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. —Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Chatterjee, Aveek N.

Mathematical Modeling and Simulation of Dissolvable Hydrogels. —Aveek N. Chatterjee, Qing Yu, J. S. Moore, and N. R. Aluru; 16(2), 55-64 (2003).

Chen, Jack

Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. —Jack Chen, Zhifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Dasgupta, Gautam

Interpolants within Convex Polygons: Wachspress' Shape Functions. —Gautam Dasgupta; 16(1), 1-8 (2003).

Integration within Polygonal Finite Elements. —Gautam Dasgupta; 16(1), 9-18 (2003).

Dawood, Anwar S.

FPGA Based Satellite Adaptive Image Compression System. —Stephen J. Visser, Anwar S. Dawood, and John A. Williams; 16(3), 129-37 (2003).

Depczuk, D.

Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. —D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Di, Yang

Active Magnetic Control Methods for Small Satellite. —Sun Zhaowei, Yang Xu, and Yang Di; 16(1), 38-44 (2003).

Engel, Jonathan

Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. —Jack Chen, Zhifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Ergun, Arif S.

Capacitive Micromachined Ultrasonic Transducers: Theory and Technology. —Arif S. Ergun, Goksen G. Yaralioglu, and Butrus T. Khuri-Yakub; 16(2), 76-84 (2003).

Fan, Zhifang

Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. —Jack Chen, Zhifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Fedder, Gary K.

Integrated Microelectromechanical Gyroscopes. —Huikai Xie and Gary K. Fedder; 16(2), 65-75 (2003).

Gorain, Ganesh C.

H_2 Energy Estimate of Boundary Controlled Vibrating Hybrid Structure Subject to Uncertain Forces. —Sujit K. Bose and Ganesh C. Gorain; 16(3), 115-20 (2003).

Gordnier, Raymond E.

Computation of Three-Dimensional Nonlinear Panel Flutter. —Raymond E. Gordnier and Miguel R. Visbal; 16(4), 155-66 (2003).

Kenny, Thomas W.

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. —Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Khot, Narendra S.

Design of Flutter Characteristics of Composite Wings Using Frequency Constraint Optimization. —Narendra S. Khot and Jeffrey V. Zweber; 16(1), 19-30 (2003).

Khuri-Yakub, Butrus T.

Capacitive Micromachined Ultrasonic Transducers: Theory and Technology. —Arif S. Ergun, Goksen G. Yaralioglu, and Butrus T. Khuri-Yakub; 16(2), 76-84 (2003).

Kicher, Thomas

Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. —Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Kiremidjian, Anne S.

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. —Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Kurdila, Andrew J.

Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. —Andrew J. Kurdila, Jing Li, Thomas Stroganac, and Glenn Webb; 16(4), 167-76 (2003).

Law, Kincho H.

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. —Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Lee, Hosin "David"

Full-Scale Field Evaluation of Microelectromechanical System-Based Biaxial Strain Transducer and Its Application in Fatigue Analysis. —M. Obadat, Hosin "David" Lee, M. Asghar Bhatti, and Brian Maclean; 16(3), 100-7 (2003).

Li, Jing

Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. —Andrew J. Kurdila, Jing Li, Thomas Stroganac, and Glenn Webb; 16(4), 167-76 (2003).

Liu, Chang

Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. —Jack Chen, Zhifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Lynch, Jerome P.

Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. —Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Maclean, Brian

Full-Scale Field Evaluation of Microelectromechanical System-Based Biaxial Strain Transducer and Its Application in Fatigue Analysis. —M. Obadat, Hosin "David" Lee, M. Asghar Bhatti, and Brian Maclean; 16(3), 100-7 (2003).

Manvi, Ram

Decision Tree Assessment of Challenging Technologies for Mission to Europa. —Ram Manvi, Charles Weisbin, Wayne Zimmerman, and Guillermo Rodriguez; 16(3), 121-8 (2003).

Mehregany, Mehran

Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. —Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Mitchell, Jay S.
Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. — Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Moore, J. S.
Mathematical Modeling and Simulation of Dissolvable Hydrogels. — Aweek N. Chatterjee, Qing Yu, J. S. Moore, and N. R. Aluru; 16(2), 55-64 (2003).

Obadat, M.
Full-Scale Field Evaluation of Microelectromechanical System-Based Biaxial Strain Transducer and Its Application in Fatigue Analysis. — M. Obadat, Hosin "David" Lee, M. Asghar Bhatti, and Brian Maclean; 16(3), 100-7 (2003).

Oppenheim, Irving J.
MEMS Devices and Applications in Aerospace and Civil Engineering. — Irving J. Oppenheim; 16(2), 45 (2003).

Two Demonstrations of MEMS in Civil Engineering. — Irving J. Oppenheim; 16(3), 99 (2003).

Partridge, Aaron
Design of Piezoresistive MEMS-Based Accelerometer for Integration with Wireless Sensing Unit for Structural Monitoring. — Jerome P. Lynch, Aaron Partridge, Kincho H. Law, Thomas W. Kenny, Anne S. Kiremidjian, and Ed Carryer; 16(3), 108-14 (2003).

Rodriguez, Guillermo
Decision Tree Assessment of Challenging Technologies for Mission to Europa. — Ram Manvi, Charles Weisbin, Wayne Zimmerman, and Guillermo Rodriguez; 16(3), 121-8 (2003).

Rogers, E.
Experimental Validation of Lagrange-Rayleigh-Ritz Modeling Technique for Mass Loaded Actively Controlled Panels. — G. S. Aglietti and E. Rogers; 16(1), 31-7 (2003).

Roy, Shuvo
Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. — Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Schonberg, W. P.
Characterizing Debris Clouds Created in Oblique Orbital Debris Particle Impact. — D. Depczuk and W. P. Schonberg; 16(4), 177-90 (2003).

Strganac, Thomas
Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. — Andrew J. Kurdila, Jing Li, Thomas Strganac, and Glenn Webb; 16(4), 167-76 (2003).

Visbal, Miguel R.
Computation of Three-Dimensional Nonlinear Panel Flutter. — Raymond E. Gordnier and Miguel R. Visbal; 16(4), 155-66 (2003).

Visser, Stephen J.
FPGA Based Satellite Adaptive Image Compression System. — Stephen J. Visser, Anwar S. Dawood, and John A. Williams; 16(3), 129-37 (2003).

Webb, Glenn
Nonlinear Control Methodologies for Hysteresis in PZT Actuated On-Blade Elevons. — Andrew J. Kurdila, Jing Li, Thomas Strganac, and Glenn Webb; 16(4), 167-76 (2003).

Weisbin, Charles
Decision Tree Assessment of Challenging Technologies for Mission to Europa. — Ram Manvi, Charles Weisbin, Wayne Zimmerman, and Guillermo Rodriguez; 16(3), 121-8 (2003).

Williams, John A.
FPGA Based Satellite Adaptive Image Compression System. — Stephen J. Visser, Anwar S. Dawood, and John A. Williams; 16(3), 129-37 (2003).

Xie, Huikai
Integrated Microelectromechanical Gyroscopes. — Huikai Xie and Gary K. Fedder; 16(2), 65-75 (2003).

Xu, Yang
Active Magnetic Control Methods for Small Satellite. — Sun Zhaowei, Yang Xu, and Yang Di; 16(1), 38-44 (2003).

Yaralioglu, Goksen G.
Capacitive Micromachined Ultrasonic Transducers: Theory and Technology. — Arif S. Ergun, Goksen G. Yaralioglu, and Butrus T. Khuri-Yakub; 16(2), 76-84 (2003).

Yu, Qing
Mathematical Modeling and Simulation of Dissolvable Hydrogels. — Aweek N. Chatterjee, Qing Yu, J. S. Moore, and N. R. Aluru; 16(2), 55-64 (2003).

Zhaowei, Sun
Active Magnetic Control Methods for Small Satellite. — Sun Zhaowei, Yang Xu, and Yang Di; 16(1), 38-44 (2003).

Zimmerman, Wayne
Decision Tree Assessment of Challenging Technologies for Mission to Europa. — Ram Manvi, Charles Weisbin, Wayne Zimmerman, and Guillermo Rodriguez; 16(3), 121-8 (2003).

Zorman, Christian A.
Examination of Bulge Test for Determining Residual Stress, Young's Modulus, and Poisson's Ratio of 3C-SiC Thin Films. — Jay S. Mitchell, Christian A. Zorman, Thomas Kicher, Shuvo Roy, and Mehran Mehregany; 16(2), 46-54 (2003).

Zou, Jun
Two-Dimensional Micromachined Flow Sensor Array for Fluid Mechanics Studies. — Jack Chen, Zhifang Fan, Jun Zou, Jonathan Engel, and Chang Liu; 16(2), 85-97 (2003).

Zweber, Jeffrey V.
Design of Flutter Characteristics of Composite Wings Using Frequency Constraint Optimization. — Narendra S. Khot and Jeffrey V. Zweber; 16(1), 19-30 (2003).

